

Building Drinking Water Capacity in Native Alaskan Villages



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Drinking Water Program

Old Wooden Water Tank in Larsen Bay (DCED)

Health Problem

- Historically, there have been high rates of diseases associated with unsafe drinking water and lack of sanitation in Alaska Native Villages:
 - Hepatitis A
 - Diarrhea
 - Skin rashes and boils
 - Pneumonia

House in Shishmaref (DCED)



Public Health Intervention



- To address the public health problem, federal and state agencies were funded to build water treatment plants and sewage lagoons in villages:
- ANTHC
- VSW
- ADEC Drinking Water Program
- Water Storage Tank in Shaktoolik (DCED)

Safe Drinking Water Act

- The 1996 Amendments to the Safe Drinking Water Act (SDWA) require that all public water systems demonstrate that they have the technical, managerial and financial capacity to deliver safe drinking water to their consumers
- The ADEC Drinking Water Program is the “primacy” agency responsible for implementing the SDWA in Alaska
- Demonstrating capacity has been a challenge for Alaska Native Villages
- Public health goals continue to be unmet

Problem Statement

- Why are Alaska Native Villages having difficulty developing the technical, managerial and financial capacity necessary to produce safe drinking water?



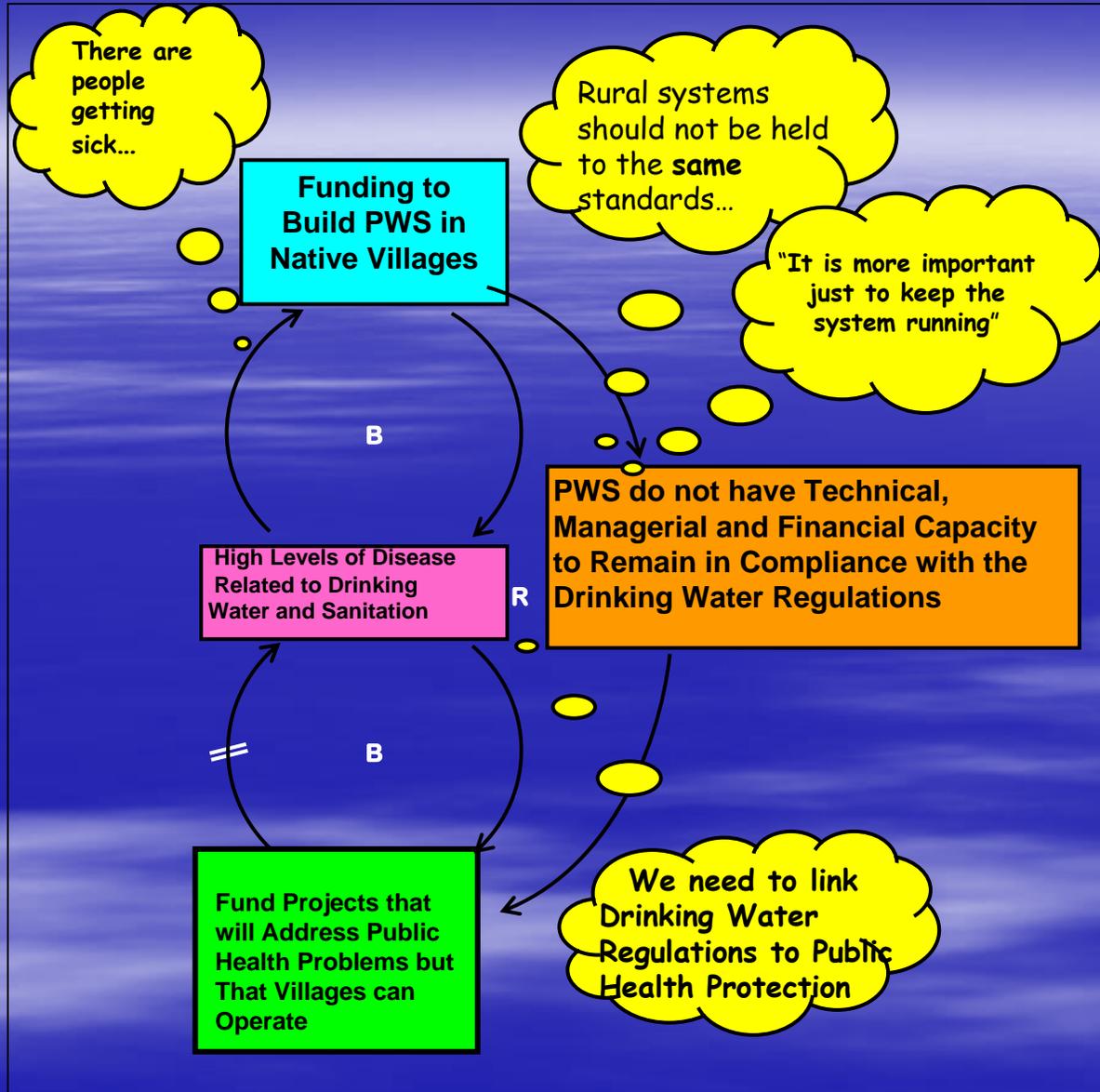
Elder and child in Little Diomedede (DCED)

Main Reasons



- Lack of Trained Operators
- Lack of Economic Resources
- Geographic/Climatic Extremes
- Lack of Commitment in the Village
- Social Concerns/Issues

Watering Point in Hooper Bay (DCED Division of Community Advocacy)



Shifting The Burden Archetype

Project Objectives

- Improve coordination and communication between Technical Assistance Providers
- Improve communications with Alaska Native Villages
- Develop a new process to address historic EPA SNC's
- Identify villages that would benefit from process
- Provide Cross Cultural Training for Drinking Water Program Staff



Children on Beach in Perryville (DCED Division of Community Advocacy)

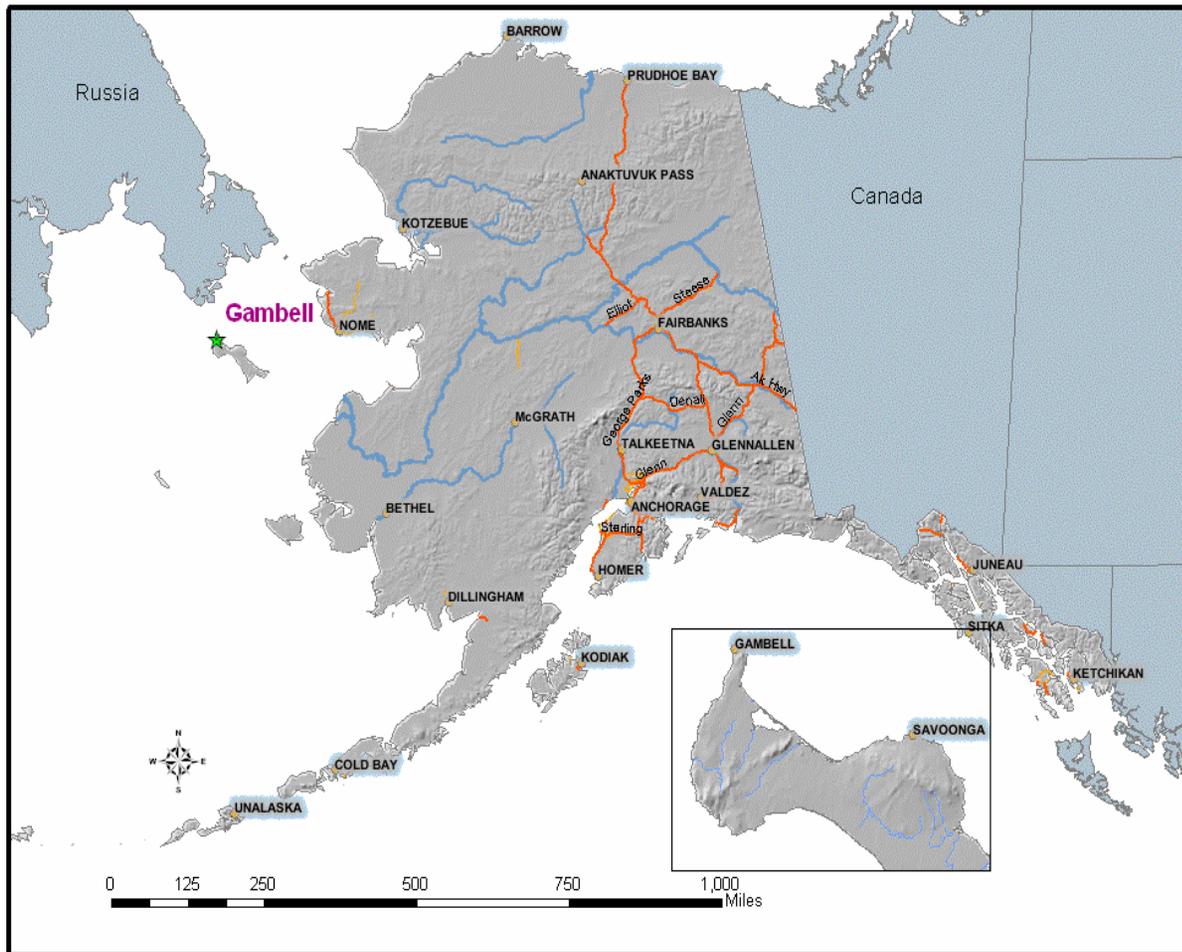
The Native Village of Gambell

- Located on St. Lawrence Island in the Bering Sea
- Population is approximately 660
- Most people are Yup'ik Eskimo
- One of the most traditional villages in Alaska
- Subsistence lifestyle based on hunting of marine mammals
- The drinking water comes from an infiltration gallery and is treated by filtration and disinfection
- Most people use the water

View of Gambell from Hill (DCED)



Gambell, Alaska



Map by Johnny Mendez, ADEC Drinking Water Program

Views of Gambell (DCED)

Progress to Date

- **Monthly coordination meetings with the Technical Assistance Providers (TAP) have been held every month since January 2006.**
- **A diagnostic process for addressing historic SNC's has been developed by the TAP group.**
- **The Native Village of Gambell has participated in the process and has returned to compliance with all Drinking Water Regulations.**
- **Additional villages have been selected to participate in the process.**
- **All Drinking Water Program staff have completed Cross Cultural Training.**
- **Drinking Water Program communications (letters, phone) have been revised to eliminate unnecessary regulatory language.**

Whale Bones in Gambell (DCED Division of Community Advocacy)

Next Steps

- Continue to build meaningful partnerships with other TAP's
- Identify additional villages that would benefit from the TAP process
- Review the diagnostic tool to ensure accuracy
- Enhance the working relationship between DW Program and VSW and ANTHC
- Work with EPA to develop a definition of “significant compliance” for villages
- Foster mentoring relationships between villages

Kotzebue Sound (Johnny Mendez, ADEC Drinking Water Program)